

AF/2312
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| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 08/767,928 | |
| | Filing Date | December 17, 1994 | |
| | First Named Inventor | Dryer | |
| | Group Art Unit | 2312 | |
| | Examiner Name | Starks | |
| Total Number of Pages in This Submission | 17 | Attorney Docket Number | AT9-96-312 |

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| ENCLOSURES (check all that apply) | | |
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| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|---------------------------|
| Firm or Individual name | Andrea Pair Bryant |
| Signature | <i>Andrea Pair Bryant</i> |
| Date | 6 August 2001 |

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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$)

Complete if Known

| | |
|----------------------|-------------------|
| Application Number | 08/767,928 |
| Filing Date | December 12, 1996 |
| First Named Inventor | Dryer |
| Examiner Name | Starks |
| Group Art Unit | 2312 |
| Attorney Docket No. | AT9-96-312 |

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METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number: 09-0447
Deposit Account Name: IBM Corp.

- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☐ Payment Enclosed:

☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

| | Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid |
|-----|----------------------------|----------------------------|------------------------|----------|
| 101 | 710 | 201 355 | Utility filing fee | |
| 106 | 320 | 206 160 | Design filing fee | |
| 107 | 490 | 207 245 | Plant filing fee | |
| 108 | 710 | 208 355 | Reissue filing fee | |
| 114 | 150 | 214 75 | Provisional filing fee | |

SUBTOTAL (1) (\$)

2. EXTRA CLAIM FEES

Total Claims: -20** = X =
Independent Claims: -3** = X =
Multiple Dependent: =

| | Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description |
|-----|----------------------------|----------------------------|--|
| 103 | 18 | 203 9 | Claims in excess of 20 |
| 102 | 80 | 202 40 | Independent claims in excess of 3 |
| 104 | 270 | 204 135 | Multiple dependent claim, if not paid |
| 109 | 80 | 209 40 | ** Reissue independent claims over original patent |
| 110 | 18 | 210 9 | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

| | Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid |
|-----|----------------------------|----------------------------|--|----------|
| 105 | 130 | 205 65 | Surcharge - late filing fee or oath | |
| 127 | 50 | 227 25 | Surcharge - late provisional filing fee or cover sheet | |
| 139 | 130 | 139 130 | Non-English specification | |
| 147 | 2,520 | 147 2,520 | For filing a request for ex parte reexamination | |
| 112 | 920* | 112 920* | Requesting publication of SIR prior to Examiner action | |
| 113 | 1,840* | 113 1,840* | Requesting publication of SIR after Examiner action | |
| 115 | 110 | 215 55 | Extension for reply within first month | |
| 116 | 390 | 216 195 | Extension for reply within second month | |
| 117 | 890 | 217 445 | Extension for reply within third month | |
| 118 | 1,390 | 218 695 | Extension for reply within fourth month | |
| 128 | 1,890 | 228 945 | Extension for reply within fifth month | |
| 119 | 310 | 219 155 | Notice of Appeal | |
| 120 | 310 | 220 155 | Filing a brief in support of an appeal | |
| 121 | 270 | 221 135 | Request for oral hearing | |
| 138 | 1,510 | 138 1,510 | Petition to institute a public use proceeding | |
| 140 | 110 | 240 55 | Petition to revive - unavoidable | |
| 141 | 1,240 | 241 620 | Petition to revive - unintentional | |
| 142 | 1,240 | 242 620 | Utility issue fee (or reissue) | |
| 143 | 440 | 243 220 | Design issue fee | |
| 144 | 600 | 244 300 | Plant issue fee | |
| 122 | 130 | 122 130 | Petitions to the Commissioner | |
| 123 | 50 | 123 50 | Processing fee under 37 CFR 1.17(q) | |
| 126 | 180 | 126 180 | Submission of Information Disclosure Stmt | |
| 581 | 40 | 581 40 | Recording each patent assignment per property (times number of properties) | |
| 146 | 710 | 246 355 | Filing a submission after final rejection (37 CFR § 1.129(a)) | |
| 149 | 710 | 249 355 | For each additional invention to be examined (37 CFR § 1.129(b)) | |
| 179 | 710 | 279 355 | Request for Continued Examination (RCE) | |
| 169 | 900 | 169 900 | Request for expedited examination of a design application | |

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

SUBMITTED BY

| | | | | | |
|-------------------|--------------------|-----------------------------------|----------|-----------|----------------|
| Name (Print/Type) | Andrea Pair Bryant | Registration No. (Attorney/Agent) | 28,191 | Telephone | (512) 345-5806 |
| Signature | Andrea Pair Bryant | Date | 6 Aug 01 | | |

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#15/Reply Brief
T. McBeth Brown
AT9-96-0312
8/14/01

CERTIFICATE OF MAILING UNDER 37 CFR § 1.10

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: David C. Dryer et al.
Serial No.: 08/767,928
Filing Date: December 17, 1996
Group Art Unit: 2312
Examiner: W. Starks
For: Selection of Graphical User Interface Agents by Cluster Analysis

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Commissioner for Patents
Washington, D.C. 20231

REPLY BRIEF

This paper is responsive to the EXAMINER'S ANSWER dated June 12, 2001. In this narrative, Applicants use 'cluster(s)' and 'group(s)' interchangeably.

Applicants thank the Examiner for pointing out the changes needed to their statement of the status of claims, issues to be decided and grouping of claims.

Applicants continue to disagree with the Examiner with regard to the meaning of *AT&T Corp. v. Excel Communications, Inc.* 50 USPQ2d 1447 (AT&T) as it pertains to 35 USC § 101 and with regard to the appropriate interpretation of Suarez.

Applicants' invention, as described and claimed, relates to improvements in applying intelligent agents to human-computer interaction tasks. Specifically, the claims on appeal relate to deriving as many mutually exclusive clusters of tasks as there are intelligent agents to assign by performing an analysis on data assessing at least two user assessment variables for each of the tasks, and linking each of the intelligent agents with one of the mutually exclusive clusters. It is the intelligent agent which has been linked to a cluster which contains the task selected by a user that is displayed when the task is selected. The invention provides different agents as a function of the user chosen task to guide the user through performance of the task. The invention utilizes statistical analysis of certain user assessment variables to group tasks. The group to which a task is associated indicates how much assistance a user requires to successfully perform a given task.

Independent claims 1, 5 and 8 are method, system and computer program product, respectively, analogues of each other. Each comprises four elements related to receiving task assessment data; performing multivariate analysis on the data to derive at least as many task clusters as there are intelligent agents to assign; storing an association linking each agent with one of the task clusters; and, upon user selection of a task, displaying the intelligent agent associated with the task cluster to which the user selected task belongs.

ARGUMENT

CLAIMS 1 - 7 DEFINE STATUTORY SUBJECT MATTER UNDER 35 USC § 101

Applicants continue to assert that all claims on appeal describe statutory subject matter under § 101. The Examiner for the first time states his reliance on *In re Warmerdam* for his § 101 rejection.

Applicants believe the Examiner has focused on Applicants' citation from *AT&T* without considering what follows. The next two sentences relate to the CAFC's discussion pertaining to recitation of use, i.e. practical application, bringing a claim including a mathematical algorithm within the constraints of § 101. Applicants refer also to the first full paragraph on page 6 of their Appeal Brief.

Further, Applicants cite *AT&T* "It is clear from the written description of the '184 patent that AT&T is only claiming a process that uses the Boolean principle in order to determine the value of the PIC indicator ... Because the claimed process applies the Boolean principle to produce a useful, concrete tangible result without pre-empting other uses of the mathematical principle, on its face the claimed process falls within the scope of 101 (citations omitted)." Applicants assert that according to the CAFC in *AT&T* claims for computer implemented algorithm-inventions are statutory under § 101 so long as the invention as a whole produces a tangible, useful result.

The CAFC points out that *In re Warmerdam* is not to the contrary, noting that "The court found that the claimed process did nothing more than manipulate basic mathematical constructs..." Applicants' invention rises above *Warmerdam* since Applicants' invention does more than manipulate basic mathematical constructs. The claims on appeal use statistical analysis to form groups (clusters) of tasks and thereafter assign an intelligent agent to each group so that when a user chooses a task, the previously associated intelligent agent is displayed to guide the user. Whether described as method, system or computer program product, the present invention produces a tangible, useful result -- an appropriate intelligent agent at the user-machine interface to facilitate the user's performing a user chosen task. Applicants respectfully submit that the invention, as a whole, produces a tangible, useful result; and, as such, the claims define statutory subject matter.

CLAIMS 1, 5 and 8 ARE NOT ANTICIPATED UNDER 35 USC § 102 BY SUAREZ

It is well established that for a § 102 reference to anticipate the invention as claimed, the reference must contain each element of the claimed invention. "A claim is anticipated only if each and every element of the claim is found, either expressly or inherently, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil. Co.*, 814 F.2d 628, 631. Not only must the elements appear, they must interact to produce in essentially the same way the same result achieved by the claim being examined. "A claim is anticipated and therefore invalid only when a single prior art reference discloses each and every limitation of the claim." *Glaxo Inc. v. Novopharm, Ltd.*, 52 F.3d 1043, 1047.

Applicants respectfully submit that the Examiner has confused what the invention as a whole “produces” with what the invention as a whole “is” (including each and every claimed element) in the Examiner’s anticipation rejection of claims 1, 5 and 8. It is clear that the Examiner has focused only on the tangible, useful result of the claimed invention, i.e., displaying in a user interface an intelligent agent when a task is selected by the user, in his argument that Suarez anticipates Applicants’ claimed invention. For example, the Examiner’s Answer argument D, page 10, focuses on the fact that the three variables - task difficulty, task importance, task frequency - are not recited in the claims. Applicants’ point, referred to by the Examiner as argument E, is that the variables do not have to be recited in the claims because Suarez does not teach, or even suggest, “user assessment variables” which element is specifically claimed. The Examiner failed to directly respond to this argument other than to continue to rely on his previous statement regarding those three variables not being recited in the claim.

Applicants’ claims affirmatively recite limitations which are not anticipated by Suarez. The Examiner has failed to show anticipation of elements specifically claimed, e.g., the first three elements of claim 1.

To anticipate an invention, a reference must disclose every element of the claim(s) doing essentially the same function to achieve substantially the same result. Suarez simply does not meet the limitations recited in the claims on appeal. While Suarez does disclose intelligent agents “...executing on the computer hosts...”, Suarez neither teaches nor suggests each of the following elements required, e.g., by Applicants’ claim 1:

... receiving data assessing at least two user assessment variables for each of a plurality of tasks;

performing multivariate analysis on said data to derive from said plurality of tasks at least as many mutually exclusive clusters of tasks as there are intelligent agents to assign;

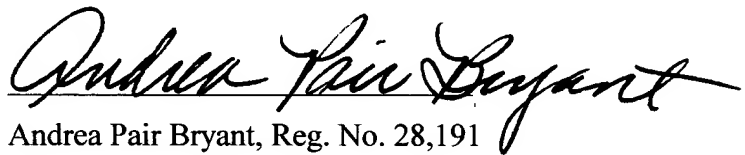
storing an association linking each of said intelligent agents with one of said mutually exclusive clusters; ...

The use by Suarez of intelligent agents and the elements recited in the claims on appeal appear to be the only reason the Examiner has for deeming Suarez to be anticipatory art. In the absence of Applicants' claims nothing is offered by the Examiner to justify modifying the teachings of Suarez to approximate the present invention.

CONCLUSION

Applicants submit that claims 1 - 7 describe statutory subject matter under 35 USC § 101 and that none of the appealed claims 1, 5 and 8 is anticipated under 35 USC § 102 by Suarez.

Respectfully submitted,

A handwritten signature in cursive script, reading "Andrea Pair Bryant". The signature is written in black ink and is positioned above the printed name.

Andrea Pair Bryant, Reg. No. 28,191

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